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1090 VERMONT AVENUE, NW
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WASHINGTON, DC 20005

EXAMINER

BOOTH, MICHAEL JOHN

ART UNIT	PAPER NUMBER
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3774

MAIL DATE	DELIVERY MODE
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02/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,326	Applicant(s) SEL ET AL.	
	Examiner MICHAEL J. BOOTH	Art Unit 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

The examiner has received applicant's arguments on 01/15/2009, to the office action mailed by the examiner on 10/15/2008.

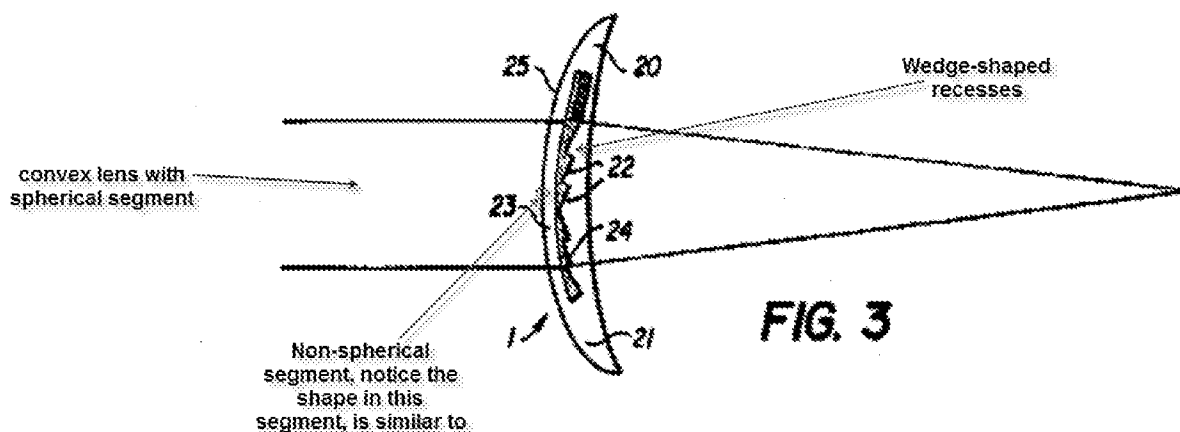
The examiner received the amendment to the specification, including the abstract and hereby withdraws the previous objection set forth.

The amendment to claims 12-13 overcome the previous rejection under 35 USC § 112 with respect to use of indefinite language and failure to particularly point out and distinctly claim the subject matter. Thus, the previous rejection under 35 USC § 112 has been withdrawn with respect to claims 12 and 13. Since claim 16 has been canceled, the previous rejection under 35 USC § 112 has been withdrawn. However, the rejection under 35 USC § 112 is upheld by the examiner and further explained in the following paragraph.

Applicant's arguments filed 01/15/2009 have been fully considered but they are not persuasive. The examiner received the amendment to the independent claim 1 and acknowledges applicant cancellation of claim 16. With respect to the prior art reference, Large (previously cited by examiner), used in the previous rejection by the examiner, the reference discloses both spherical and non-spherical segments, where at one point, defined as a segment, it is non-spherical, as in generally non-spherical shape, similar to that of a straight line. Thus, it inherently exists. The examiner has annotated figure 3 provided previously by the examiner from the prior art, where this figure meets all of the claim language. From figure 3, inherently, one side has wedge shaped recesses and

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the other has spherical and non-spherical segments. Thus, the combination does in fact exist. The examiner respectfully asserts that the claim language is unclear and fails to particularly point out and distinctly claim the subject matter, as the interpretation by the examiner meets the claim language but the examiner acknowledges the inventive concept but does not understand if the applicant wants a point, which defines a segment to be non-spherical, or a segment that is horizontal, vertical or follows the lens in the circular or oval direction. It needs to be clear, and the claims need to be amended to particularly point out and distinctly claim the subject matter. Since the independent claim has been amended to include matter rejected under 35 USC § 112, the rejection is now set forth below to all pending claims that depend on claim 1.



Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 and 17-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to the rejection set forth, it has been previously discussed above by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11, 13, 17 and 20-21 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Large (US Patent 5,712,721; hereinafter Large).

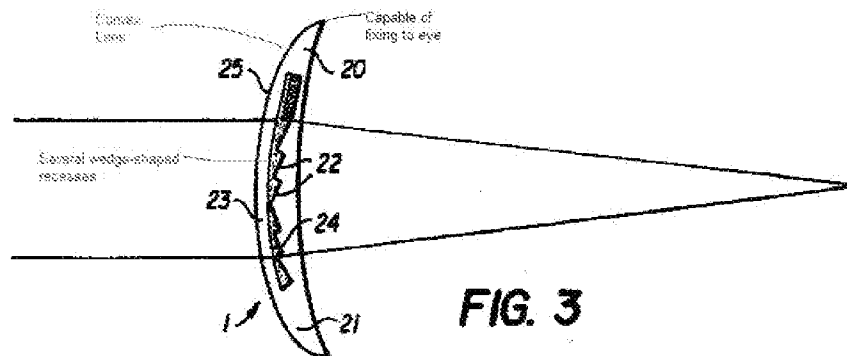
Claims 1 & 3:

See figure 3 and remarks by examiner above with respect to the spherical and non-spherical segments.

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Large discloses a lens device for the treatment of visual impairments comprising a fixing element, such as the ends, for fixing in the eye, at least one convex lens (25) and several wedge-shaped recesses (22). Regarding claim 3, Large discloses below that the wedge-shaped recesses feature different angles. The different angles of the wedge-shaped recesses can be seen in FIG. 3 below.

Large discloses a lens where one side has several wedge-shaped recesses and the other side has Fresnel lenses (10) capable of containing spherical or non-spherical segments depending on the lens chosen. (column 2, lines 55-59).



Claims 2 & 4:

Large discloses using a lens designed as a segment of a Fresnel lens. Regarding claim 4, Large further discloses a protective coating layer that encapsulated the lens, thus filling the recesses and preventing reflection of light on the edges of the lens. (column 2, lines 52-63)

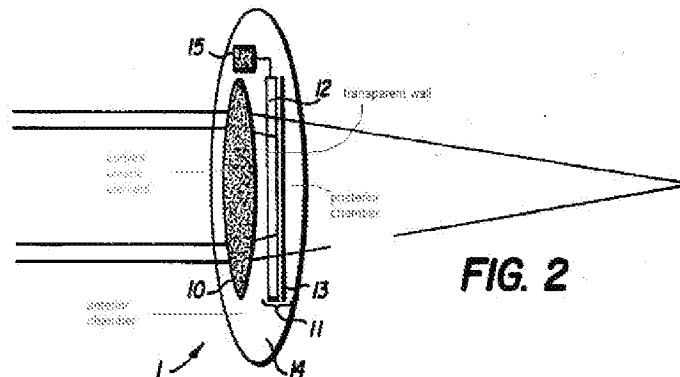
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Claims 5 & 11:

Large discloses a coating and/or material for the device to feature a refraction index equal to the chamber fluid. Regarding claim 11, Large further discloses a transparent fluid (24) that is filled in the chamber (see FIG. 3) whose refraction index is also equal to that of the coating and/or material. (column 4, lines 4-8).

Claims 6-8:

Large discloses a lens with an anterior and posterior chamber separated by a transparent wall, where the anterior chamber not facing the retina features at least one convex elastic element (column 3, lines 40-44) where alignment of the curve allows the focal width of this element is variable. (See FIG. 2). The word "chamber" is defined as a "natural or artificial enclosed space or cavity" by Merriam-Webster's online dictionary. Regarding claim 7, Large further discloses a lens with a supporting element for the recesses so that the inclination, as in when placing an object up, such as (23) against the recesses (22), the inclination angle is adjusted to meet that of the recesses depending on their angle. (See FIG. 4). Regarding claim 8, it is inherent that the supporting element is pre-stressed against rotation.



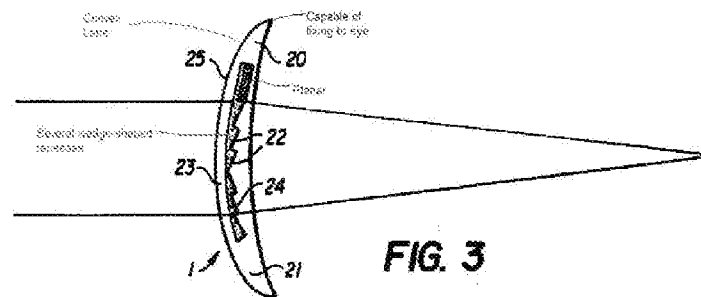
Claims 13 & 20 (as understood):

Large discloses a further optic means, such as a polarizer layer (13), that can be placed in the path of rays before or behind the lens device. (See FIG. 2). With respect to claim 20, Large discloses a lens placed with a polarizer layer and thus an optic means where the optic is a lens. (column 2, lines 52-63).

Claim 17 (as understood):

Large discloses a lens where one side is planar (See FIG. 3 below) and the other side has a superposition of wedge-shaped recesses and one or several Fresnel lenses capable of containing spherical or non-spherical segments depending on the lens chosen. (column 2, lines 55-59).

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Claim 21:

Large discloses use of electromagnetic or magnetic energy input. (See abstract and column 1, lines 53-63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-10, 12 and 18-19 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Large as applied to claim 6 above, and further in view of Skottun et al (US Patent 5,489,302; hereinafter Skottun).

Claims 9 & 18:

Large discloses the invention substantially as claimed. However, Large fails to disclose a chamber connected to a supply and removal canal, a pump or volume modification means via valve(s) [claim 18: with a characteristic curve], so elements undergo a change of form when the pump or volume means is activated. Skottun discloses a chamber with a volume modification means [claim 18: with a characteristic curve (10)] thus changing the form when activated for the purpose of allowing a lower force to act on the membrane. (column 8, line 66 - column 9, line 16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Large with a volume modification means to allow a lower force to act on the membrane. Skottun further discloses use of Boyle's law to record performance or measurements (column 9, lines 27-38). It is inherent that the pressure in the eye can be determined through Boyle's law.

Claim 10:

Large discloses a surface (23) capable of being assigned to the wedge-shaped recesses (22) where an elastic element is at (or assigned) to each of these inclined surfaces and when a surface undergoes a rotation when the pump or volume

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modification means is activated, the focal point is designed to be redirected on the retina. This is inherent as the angle would have been modified when the volume modification means is activated.

Claim 12 (as understood):

Large discloses implanting batteries capable of providing energy to the volume modification means. (column 5, lines 14-20 and 47-48).

Claim 19:

Large discloses a coating and/or material for the device to feature a refraction index equal to the chamber fluid. Large further discloses a transparent fluid (24) that is filled in the chamber (See FIG. 3) whose refraction index is also equal to that of the coating and/or material. (column 4, lines 4-8).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Large as applied to claim 1 above, and further in view of Faubl (US Patent 6,244,707; hereinafter Faubl).

Claim 14:

Large discloses the invention substantially as claimed. However, Large fails to disclose a lens with a UV-protective film for protection of the retina from UV rays. Faubl discloses a lens with a UV-protective film for protection of the retina (column 1, lines 10-

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25) for the purpose of protecting the interior of the eye. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Large with a UV-protective layer in order to protect the interior of the eye.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Large as applied to claim 1 above, and further in view of Kelman (US Patent 4,828,558; hereinafter Kelman).

Claim 15:

Large discloses the invention substantially as claimed. However, Large fails to disclose a lens designed to be foldable or elastic for reduction of the sclera tunnel incision. Kelman discloses an intraocular lens that is foldable or elastic to allow for a reduction of the sclera tunnel incision (column 3, lines 55-62) for the purpose of allowing for a smaller incision during implant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Large's lens with a foldable or elastic material in order to allow for a smaller incision during implant.

Conclusion

In order for the applicant to overcome the above rejection, the claim language must be amended to particularly and distinctly claim the inventive concept. The examiner recommends that the applicant review the prior art of record, and previously

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cited by the examiner. Further, any amendments will require a new search to determine patentability.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. BOOTH whose telephone number is (571)270-7027. The examiner can normally be reached on Monday thru Thursday 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Isabella can be reached on (571) 272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J. B./
Examiner, Art Unit 3774
January 21, 2009

/Alvin J Stewart/
Primary Examiner, Art Unit 3774